

Amendments to the Claims:

This listing of claims reflects the pending claims which are being currently amended.

Listing of Claims:

Claims 1 - 242 - Cancelled

243. (Currently Amended) A patterned phosphor structure having red, green and blue sub-pixel phosphor elements for an AC electroluminescent display, comprising:

at least a first and a second phosphor, each emitting light in different ranges of the visible spectrum, but whose combined emission spectra contains red, green and blue light;

said at least first and second phosphors being in a layer, arranged in adjacent, repeating relationship to each other to provide a plurality of repeating at least first and second phosphor deposits, said at least first and second phosphor deposits being formed from phosphors of different host materials; and

one or more means associated with one or more of the at least first and second phosphor deposits, and which together with the at least first and second phosphor deposits, form the red, green and blue sub-pixel phosphor elements, for setting and equalizing the threshold voltages of the red, green and blue sub-pixel phosphor elements, and for setting the relative luminosities of the red, green and blue sub-pixel phosphor elements so that they bear set ratios to one another at each operating modulation voltage used to generate the desired luminosities for red, green and blue.

244. (Cancel) The phosphor structure as set forth in claim 243, wherein the at least first and second phosphor deposits are formed from phosphors of different host materials.

245. (Currently Amended) The phosphor structure as set forth in claim [244] 243, wherein the set luminosity ratios remain substantially constant over the range of operating modulation voltages.

246. (Previously Presented) The phosphor structure as set forth in claim 245, wherein the set luminosities ratios between the red, green and blue sub-pixel phosphor elements is about 3:6:1.

247. (Currently Amended) The phosphor structure as set forth in claim [244] 243, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer of a dielectric material or a semiconductor material located in one or more of the positions of over, under and embedded within one or more of the at least first and second phosphor deposits.

248. (Previously Presented) The phosphor structure as set forth in claim 245, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer of a dielectric material or a semiconductor material located in one or more of the positions of over, under and embedded within one or more of the at least first and second phosphor deposits.

249. (Previously Presented) The phosphor structure as set forth in claim 246, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer of a dielectric material or a semiconductor

material located in one or more of the positions of over, under and embedded within one or more of the at least first and second phosphor deposits.

250. (Currently Amended) The phosphor structure as set forth in claim [244] 243, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises the at least first and second phosphor deposits being formed with different thicknesses.

251. (Previously Presented) The phosphor structure as set forth in claim 245, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises the at least first and second phosphor deposits being formed with different thicknesses.

252. (Previously Presented) The phosphor structure as set forth in claim 246, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises the at least first and second phosphor deposits being formed with different thicknesses.

253. (Previously Presented) The phosphor structure as set forth in claim 249, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises the at least first and second phosphor deposits being formed with different thicknesses.

254. (Previously Presented) The phosphor structure as set forth in claim 247, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

255. (Previously Presented) The phosphor structure as set forth in claim 248, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

256. (Previously Presented) The phosphor structure as set forth in claim 249, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

257. (Previously Presented) The phosphor structure as set forth in claim 250, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

258. (Previously Presented) The phosphor structure as set forth in claim 251, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

259. (Previously Presented) The phosphor structure as set forth in claim 252, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

260. (Previously Presented) The phosphor structure as set forth in claim 253, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

261. (Previously Presented) The phosphor structure as set forth in claim 260, wherein the at least first and second phosphor deposits are formed from a zinc sulfide phosphor and a strontium sulfide phosphor.

262. (Previously Presented) The phosphor structure as set forth in claim 261, wherein the blue sub-pixel elements, and optionally the green sub-pixel elements are formed with a strontium sulfide phosphor, and wherein the red sub-pixel elements, and optionally the green sub-pixel elements are formed from one or more zinc sulfide phosphors.

263. (Previously Presented) The phosphor structure as set forth in claim 262, wherein the strontium sulfide phosphor is SrS:Ce and wherein the zinc sulfide phosphor is one or both of ZnS:Mn or $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$, with x being between 0.1 and 0.3.

264. (Previously Presented) The phosphor structure as set forth in claim 261, wherein the first phosphor is SrS:Ce and the second phosphor is one or more of ZnS:Mn or $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$, with x being between 0.1 and 0.3, and wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises a further layer of SrS:Ce over the first and second phosphor deposits, whereby the blue sub-pixel elements are provided by SrS:Ce and

the red and green sub-pixel elements are provided by SrS:Ce and one or both of ZnS:Mn or $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$.

265. (Currently Amended) The phosphor structure as set forth in claim 263, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises [a] the threshold voltage adjustment layer over the red and green sub-pixel phosphor deposits.

266. (Previously Presented) The phosphor structure as set forth in claim 263, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises the phosphor deposits being formed with different thicknesses.

267. (Previously Presented) The phosphor structure as set forth in claim 264, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises the phosphor deposits being formed with different thicknesses.

268. (Previously Presented) The phosphor structure as set forth in claim 265, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises the phosphor deposits being formed with different thicknesses.

269. (Previously Presented) The phosphor structure as set forth in claim 263, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises varying the areas of one or more of the sub-pixel phosphor deposits.

270. (Previously Presented) The phosphor structure as set forth in claim 264, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises varying the areas of one or more of the sub-pixel phosphor deposits.

271. (Previously Presented) The phosphor structure as set forth in claim 265, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises varying the areas of one or more of the sub-pixel phosphor deposits.

272. (Previously Presented) The phosphor structure as set forth in claim 268, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises varying the areas of one or more of the sub-pixel phosphor deposits.

273. (Previously Presented) The phosphor structure as set forth claim 243, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer selected from the group consisting of one or more of a dielectric material or a semiconductor material, which, at its deposited thickness, does not conduct until the voltage across the patterned phosphor structure exceeds the threshold voltage which the patterned phosphor structure would have without the threshold voltage adjustment layer.

274. (Cancel) The phosphor structure as set forth claim 244, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer selected from the group consisting of one or more of a dielectric material or a semiconductor material, which, at its deposited thickness, does not conduct until the voltage across the patterned phosphor structure exceeds the threshold voltage which the patterned phosphor structure would have without the threshold voltage adjustment layer.

275. (Currently Amended) The phosphor structure as set forth claim 272, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises [a] the threshold voltage adjustment layer being selected from the group consisting of one or more of a dielectric material or a semiconductor material, which, at its deposited thickness, does not conduct until the voltage across the patterned phosphor structure exceeds the threshold voltage which the patterned phosphor structure would have without the threshold voltage adjustment layer.

276. (Previously Presented) The phosphor structure as set forth in claim 275, wherein the threshold voltage adjustment layer is selected from the group consisting of binary metal oxides, binary metal sulfides, silica and silicon oxynitride.

277. (Previously Presented) The phosphor structure as set forth in claim 275, wherein the threshold voltage adjustment layer is selected from the group consisting of alumina, tantalum oxide, zinc sulfide, strontium sulfide, silica and silicon oxynitride..

278. (Previously Presented) The phosphor structure as set forth in claim 275, wherein the threshold voltage adjustment layer is selected from the group consisting of alumina and zinc sulfide.

279. (Previously Presented) The phosphor structure as set forth in claim 275, wherein threshold voltage adjustment layer is matched with the at least first or second phosphor deposits, such that if the phosphor deposit is formed from a zinc sulfide phosphor, the threshold voltage adjustment layer, if needed with that phosphor deposit, is a binary metal oxide.

280. (Previously Presented) The phosphor structure as set forth in claim 279, wherein the binary metal oxide is alumina when the phosphor deposit is one or more of ZnS:Mn or $Zn_{1-x}Mg_xS:Mn$, with x being between 0.1 and 0.3.

281. (Previously Presented) The phosphor structure as set forth in claim 260, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises an additional phosphor layer deposited in one or more of the positions of over, under and embedded within the at least first and second phosphor deposits, having a same or different composition from the at least first and second phosphor deposits.

282. (Currently Amended) The phosphor structure as set forth in claim 260, wherein the first and second phosphor deposits are a strontium sulfide phosphor providing the blue sub-pixel elements and a zinc sulfide phosphor providing the red and green sub-pixel elements, and wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities is [a] the threshold voltage adjustment layer being selected from the group consisting of one or more of a dielectric material or a semiconductor material in one or more of the positions of over, under and embedded within the zinc sulfide phosphor deposits.

283. (Previously Presented) The phosphor structure as set forth in claim 282, wherein the phosphors are SrS:Ce, which may be codoped with phosphorus, and $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$, with x being between 0.1 and 0.3, and wherein the threshold voltage adjustment layer is a layer of alumina located over the $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$ phosphor deposits.

284. (Previously Presented) The phosphor structure as set forth in claim 260, wherein the first and second phosphor deposits are a strontium sulfide phosphor providing the blue sub-pixel elements and one or more layers of a zinc sulfide phosphor providing the red and green sub-pixel elements, and wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities is the strontium sulfide phosphor deposits being formed thicker and wider than the zinc sulfide phosphor deposits.

285. (Previously Presented) The phosphor structure as set forth in claim 284, wherein the phosphors are SrS:Ce for the blue sub-pixel elements, which may be codoped with phosphorus, and for the red and green sub-pixels, $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$ between layers of ZnS:Mn, with x being between 0.1 and 0.3.

286. (Currently Amended) The phosphor structure as set forth in claim 260, wherein the first and second phosphor deposits are a strontium sulfide phosphor providing the blue and green sub-pixel elements and a zinc sulfide phosphor providing the red sub-pixel elements, and wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities is [a] the threshold voltage adjustment layer being selected from the group consisting of one or more of a dielectric material or a semiconductor material in one or more of the position of over, under and embedded within the zinc sulfide phosphor deposits.

287. (Previously Presented) The phosphor structure as set forth in claim 286, wherein the phosphors are SrS:Ce, which may be codoped with phosphorus, and ZnS:Mn, and wherein the threshold voltage adjustment layer is a layer of alumina located over the ZnS:Mn phosphor deposits.

288. (Currently Amended) An EL laminate for use in an AC electroluminescent display, comprising:

a rigid rear substrate;

a patterned phosphor structure comprising:

at least a first and a second phosphor, each emitting light in different ranges of the visible spectrum, but whose combined emission spectra contains red, green and blue light;

said at least first and second phosphors being in a layer, arranged in adjacent, repeating relationship to each other to provide a plurality of repeating at least first and second phosphor deposits; and

one or more means associated with one or more of the at least first and second phosphor deposits, and which together with the at least first and second phosphor deposits, form the red, green and blue sub-pixel phosphor elements, for setting and equalizing the threshold voltages of the red, green and blue sub-pixel phosphor elements, and for setting the relative luminosities of the red, green and blue sub-pixel phosphor elements so that they bear set ratios to one another at each operating modulation voltage used to generate the desired luminosities for red, green and blue;

front and rear column and row electrodes on either side of the phosphor structure, the rows or columns of the front or rear electrode being aligned with the phosphor sub-pixel elements;

a thick film dielectric layer below the patterned phosphor structure formed from a sintered ceramic material having a dielectric constant greater than 500, and having a thickness sufficient to prevent dielectric breakdown during operation as determined by the equation $d_2 = V / S$, wherein d_2 is the thickness of the dielectric layer, S is the dielectric strength of the dielectric layer and V is the maximum applied voltage; and

optionally, optical colour filter means aligned with the red, green and blue phosphor sub-pixel elements for transmitting red, green and blue light emitted from the phosphor sub-pixel elements.

289. (Previously Presented) The EL laminate as set forth in claim 288, wherein the at least first and second phosphor deposits are formed from phosphors of different host materials.

290. (Previously Presented) The EL laminate as set forth in claim 289, wherein the set luminosity ratios remain substantially constant over the range of operating modulation voltages.

291. (Previously Presented) The EL laminate as set forth in claim 290, wherein the set luminosities ratios between the red, green and blue sub-pixel phosphor elements is about 3:6:1.

292. (Previously Presented) The EL laminate as set forth in claim 289, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer of a dielectric material or a semiconductor material located

in one or more of the positions of over, under and embedded within one or more of the at least first and second phosphor deposits.

293. (Previously Presented) The EL laminate as set forth in claim 290, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer of a dielectric material or a semiconductor material located in one or more of the positions of over, under and embedded within one or more of the at least first and second phosphor deposits.

294. (Previously Presented) The EL laminate as set forth in claim 291, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer of a dielectric material or a semiconductor material located in one or more of the positions of over, under and embedded within one or more of the at least first and second phosphor deposits.

295. (Previously Presented) The EL laminate as set forth in claim 289, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises the at least first and second phosphor deposits being formed with different thicknesses.

296. (Previously Presented) The EL laminate as set forth in claim 290, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises the at least first and second phosphor deposits being formed with different thicknesses.

297. (Previously Presented) The EL laminate as set forth in claim 291, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises the at least first and second phosphor deposits being formed with different thicknesses.

298. (Previously Presented) The EL laminate as set forth in claim 294, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises the at least first and second phosphor deposits being formed with different thicknesses.

299. (Previously Presented) The EL laminate as set forth in claim 292, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

300. (Previously Presented) The EL laminate as set forth in claim 293, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:

- i. the areas of the phosphor deposits; and
- ii. the concentrations of a dopant or co-dopant in the phosphor deposits.

301. (Previously Presented) The EL laminate as set forth in claim 294, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:
- i. the areas of the phosphor deposits; and
 - ii. the concentrations of a dopant or co-dopant in the phosphor deposits.
302. (Previously Presented) The EL laminate as set forth in claim 295, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:
- i. the areas of the phosphor deposits; and
 - ii. the concentrations of a dopant or co-dopant in the phosphor deposits.
303. (Previously Presented) The EL laminate as set forth in claim 296, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:
- i. the areas of the phosphor deposits; and
 - ii. the concentrations of a dopant or co-dopant in the phosphor deposits.
304. (Previously Presented) The EL laminate as set forth in claim 297, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:
- i. the areas of the phosphor deposits; and
 - ii. the concentrations of a dopant or co-dopant in the phosphor deposits.
305. (Previously Presented) The EL laminate as set forth in claim 298, wherein, the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, further comprises varying one or both of the following:
- i. the areas of the phosphor deposits; and
 - ii. the concentrations of a dopant or co-dopant in the phosphor deposits.
306. (Previously Presented) The EL laminate as set forth in claim 305, wherein the at least first and second phosphor deposits are formed from a zinc sulfide phosphor and a strontium sulfide phosphor.
307. (Previously Presented) The EL laminate as set forth in claim 306, wherein the blue sub-pixel elements, and optionally the green sub-pixel elements are formed with a strontium sulfide phosphor, and wherein the red sub-pixel elements, and optionally the green sub-pixel elements are formed from one or more zinc sulfide phosphors.
308. (Previously Presented) The EL laminate as set forth in claim 307, wherein the strontium sulfide phosphor is SrS:Ce and wherein the zinc sulfide phosphor is one or more of ZnS:Mn or $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$, with x being between 0.1 and 0.3.

309. (Previously Presented) The EL laminate as set forth in claim 306, wherein the first phosphor is SrS:Ce and the second phosphor is one or more of ZnS:Mn or $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$, with x being between 0.1 and 0.3, and wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises a further layer of SrS:Ce over the first and second phosphor deposits, whereby the blue sub-pixel elements are provided by SrS:Ce and the red and green sub-pixel elements are provided by SrS:Ce and one or both of ZnS:Mn or $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$.

310. (Currently Amended) The EL laminate as set forth in claim 308, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises [a] the threshold voltage adjustment layer over the red and green sub-pixel phosphor deposits.

311. (Previously Presented) The EL laminate as set forth in claim 308, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises the phosphor deposits being formed with different thicknesses.

312. (Previously Presented) The EL laminate as set forth in claim 309, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises the phosphor deposits being formed with different thicknesses.

313. (Previously Presented) The EL laminate as set forth in claim 310, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises the phosphor deposits being formed with different thicknesses.

314. (Previously Presented) The EL laminate as set forth in claim 308, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises varying the areas of one or more of the sub-pixel phosphor deposits.

315. (Previously Presented) The EL laminate as set forth in claim 309, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises varying the areas of one or more of the sub-pixel phosphor deposits.

316. (Previously Presented) The EL laminate as set forth in claim 310, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises varying the areas of one or more of the sub-pixel phosphor deposits.

317. (Previously Presented) The EL laminate as set forth in claim 313, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises varying the areas of one or more of the sub-pixel phosphor deposits.

318. (Previously Presented) The EL laminate as set forth claim 288, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer selected from the group consisting of one or more of a dielectric material or a semiconductor material, which, at its deposited thickness, does not

conduct until the voltage across the patterned phosphor structure exceeds the threshold voltage which the patterned phosphor structure would have without the threshold voltage adjustment layer.

319. (Previously Presented) The EL laminate as set forth claim 289, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises a threshold voltage adjustment layer selected from the group consisting of one or more of a dielectric material or a semiconductor material, which, at its deposited thickness, does not conduct until the voltage across the patterned phosphor structure exceeds the threshold voltage which the patterned phosphor structure would have without the threshold voltage adjustment layer.

320. (Currently Amended) The EL laminate as set forth claim 317, wherein the means for setting and equalizing the threshold voltages, and for setting the relative luminosities, comprises [a] the threshold voltage adjustment layer being selected from the group consisting of one or more of a dielectric material or a semiconductor material, which, at its deposited thickness, does not conduct until the voltage across the patterned phosphor structure exceeds the threshold voltage which the patterned phosphor structure would have without the threshold voltage adjustment layer.

321. (Previously Presented) The EL laminate as set forth in claim 320, wherein the threshold voltage adjustment layer is selected from the group consisting of binary metal oxides, binary metal sulfides, silica and silicon oxynitride.

322. (Previously Presented) The EL laminate as set forth in claim 320, wherein the threshold voltage adjustment layer is selected from the group consisting of alumina, tantalum oxide, zinc sulfide, strontium sulfide, silica and silicon oxynitride.

323. (Previously Presented) The EL laminate as set forth in claim 320, wherein the threshold voltage adjustment layer is selected from the group consisting of alumina and zinc sulfide.

324. (Previously Presented) The EL laminate as set forth in claim 320, wherein threshold voltage adjustment layer is matched with the at least first or second phosphor deposits, such that if the phosphor deposit is formed from a zinc sulfide phosphor, the threshold voltage adjustment layer, if needed with that phosphor deposit, is a binary metal oxide.

325. (Previously Presented) The EL laminate as set forth in claim 324, wherein the binary metal oxide is alumina when the phosphor deposit is one or more of ZnS:Mn or $\text{Zn}_{1-x}\text{Mg}_x\text{S:Mn}$, with x being between 0.1 and 0.3.

326. (Previously Presented) The EL laminate as set forth in claim 305, wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities comprises an additional phosphor layer deposited in one or more of the positions of over, under and

embedded within the at least first and second phosphor deposits, having a same or different composition from the at least first and second phosphor deposits.

327. (Currently Amended) The EL laminate as set forth in claim 305, wherein the first and second phosphor deposits are a strontium sulfide phosphor providing the blue sub-pixel elements and a zinc sulfide phosphor providing the red and green sub-pixel elements, and wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities is [a] the threshold voltage adjustment layer being selected from the group consisting of one or more of a dielectric material or a semiconductor material in one or more of the positions of over, under and embedded within the zinc sulfide phosphor deposits.

328. (Previously Presented) The EL laminate as set forth in claim 327, wherein the phosphors are SrS:Ce, which may be codoped with phosphorus, and $\text{Zn}_{1-x}\text{Mg}_x\text{S}:\text{Mn}$, with x being between 0.1 and 0.3, and wherein the threshold voltage adjustment layer is a layer of alumina located over the $\text{Zn}_{1-x}\text{Mg}_x\text{S}:\text{Mn}$ phosphor deposits.

329. (Previously Presented) The EL laminate as set forth in claim 305, wherein the first and second phosphor deposits are a strontium sulfide phosphor providing the blue sub-pixel elements and one or more layers of a zinc sulfide phosphor providing the red and green sub-pixel elements, and wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities is the strontium sulfide phosphor deposits being formed thicker and wider than the zinc sulfide phosphor deposits.

330. (Previously Presented) The EL laminate as set forth in claim 329, wherein the phosphors are SrS:Ce for the blue sub-pixel elements, which may be codoped with phosphorus, and for the red and green sub-pixels, $\text{Zn}_{1-x}\text{Mg}_x\text{S}:\text{Mn}$ between layers of ZnS:Mn, with x being between 0.1 and 0.3.

331. (Currently Amended) The EL laminate as set forth in claim 305, wherein the first and second phosphor deposits are a strontium sulfide phosphor providing the blue and green sub-pixel elements and a zinc sulfide phosphor providing the red sub-pixel elements, and wherein the means for setting and equalizing the threshold voltages and for setting the relative luminosities is [a] threshold voltage adjustment layer being selected from the group consisting of one or more of a dielectric material or a semiconductor material in one or more of the position of over, under and embedded within the zinc sulfide phosphor deposits.

332. (Previously Presented) The EL laminate as set forth in claim 331, wherein the phosphors are SrS:Ce, which may be codoped with phosphorus, and ZnS:Mn, and wherein the threshold voltage adjustment layer is a layer of alumina located over the ZnS:Mn phosphor deposits.

333. (Previously Presented) The EL laminate as set forth in claims 288, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an

unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

334. (Previously Presented) The EL laminate as set forth in claims 289, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

335. (Previously Presented) The EL laminate as set forth in claims 294, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

336. (Previously Presented) The EL laminate as set forth in claims 298, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

337. (Previously Presented) The EL laminate as set forth in claims 305, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

338. (Previously Presented) The EL laminate as set forth in claim 306, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

339. (Previously Presented) The EL laminate as set forth in claim 328, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

340. (Previously Presented) The EL laminate as set forth in claim 330, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

341. (Previously Presented) The EL laminate as set forth in claim 332, wherein the thick film dielectric layer is formed from a pressed, sintered ceramic material having, compared to an unpressed, sintered dielectric layer of the same composition, improved dielectric strength, reduced porosity and uniform luminosity in an EL laminate.

342. (Previously Presented) The EL laminate as set forth in claim 337, wherein the dielectric layer has been pressed by cold isostatic pressing to reduce the thickness, after sintering, by about 20 to 50%.
343. (Previously Presented) The EL laminate as set forth in claim 341, wherein the dielectric layer has been pressed by cold isostatic pressing to reduce the thickness, after sintering, by about 20 to 50%.
344. (Previously Presented) The EL laminate as set forth in claim 343, wherein the pressed ceramic material has a reduced thickness, after sintering, of 30 to 40%.
345. (Previously Presented) The EL laminate as set forth in claim 344, wherein the pressed ceramic material has a thickness, after sintering, of between 10 and 50 μm .
346. (Previously Presented) The EL laminate as set forth in claim 344, wherein the pressed ceramic material has a thickness, after sintering, of between 10 and 20 μm .
347. (Previously Presented) The EL laminate as set forth in claim 346, wherein the ceramic material is a ferroelectric ceramic material having a dielectric constant greater than 500.
348. (Previously Presented) The EL laminate as set forth in claim 347, wherein the ceramic material has a perovskite crystal structure.
349. (Previously Presented) The EL laminate as set forth in claim 348, wherein the ceramic material is selected from the group consisting of one or more of BaTiO_3 , PbTiO_3 , PMN and PMN-PT.
350. (Previously Presented) The EL laminate as set forth in claim 348, wherein the ceramic material is selected from the group consisting of BaTiO_3 , PbTiO_3 , PMN and PMN-PT.
351. (Previously Presented) The EL laminate as set forth in claim 348, wherein the ceramic material is PMN-PT.
352. (Previously Presented) The EL laminate as set forth in claim 348, wherein a second ceramic material is formed on the pressed, sintered dielectric layer to further smooth the surface.
353. (Previously Presented) The EL laminate as set forth in claim 350, wherein a second ceramic material is formed on the pressed, sintered dielectric layer to further smooth the surface.
354. (Previously Presented) The EL laminate as set forth in claim 351, wherein a second ceramic material is formed on the pressed, sintered dielectric layer to further smooth the surface.
355. (Previously Presented) The EL laminate as set forth in claim 353, wherein the second ceramic material is a ferroelectric ceramic material deposited by sol gel techniques followed by heating to convert to a ceramic material.
356. (Previously Presented) The EL laminate as set forth in claim 355, wherein the second ceramic material has a dielectric constant of at least 20 and a thickness of at least about 1 μm .

357. (Previously Presented) The EL laminate as set forth in claim 356, wherein the second ceramic material has a dielectric constant of at least 100.
358. (Previously Presented) The EL laminate as set forth in claim 357, wherein the second ceramic material has a thickness in the range of 1 to 3 μm .
359. (Previously Presented) The EL laminate as set forth in claim 358, wherein the second ceramic material is a ferroelectric ceramic material having a perovskite crystal structure.
360. (Previously Presented) The EL laminate as set forth in claim 359, wherein the second ceramic material is lead zirconium titanate or lead lanthanum zirconate titanate.
361. (Previously Presented) The EL laminate as set forth in claim 360, wherein the substrate and the rear electrode are formed from materials which can withstand temperatures of about 850°C.
362. (Previously Presented) The EL laminate as set forth in claim 361, wherein the substrate is an alumina sheet.
363. (Previously Presented) The EL laminate as set forth in claim 337, which further comprises, a diffusion barrier layer above the dielectric layer, which diffusion barrier layer is composed of a metal-containing electrically insulating binary compound that is chemically compatible with any adjacent layers and which is precisely stoichiometric.
364. (Previously Presented) The EL laminate as set forth in claim 353, which further comprises, a diffusion barrier layer above the second ceramic material, which diffusion barrier layer is composed of a metal-containing electrically insulating binary compound that is chemically compatible with any adjacent layers and which is precisely stoichiometric.
365. (Previously Presented) The EL laminate as set forth in claim 360, which further comprises, a diffusion barrier layer above the second ceramic material, which diffusion barrier layer is composed of a metal-containing electrically insulating binary compound that is chemically compatible with any adjacent layers and which is precisely stoichiometric.
366. (Previously Presented) The EL laminate as set forth in claim 365, wherein the diffusion barrier layer is formed from a compound which differs from its precise stoichiometric composition by less than 0.1 atomic percent.
367. (Previously Presented) The EL laminate as set forth in claim 366, wherein the diffusion barrier layer is formed from alumina, silica, or zinc sulfide.
368. (Previously Presented) The EL laminate as set forth in claim 366, wherein the diffusion barrier is formed from alumina.
369. (Previously Presented) The EL laminate as set forth in claim 367, wherein the diffusion barrier has a thickness of 100 to 1000 Å.

370. (Previously Presented) The EL laminate as set forth in claim 368, wherein the diffusion barrier has a thickness of 100 to 1000 Å.

371. (Previously Presented) The EL laminate as set forth in claim 337, which further comprises, an injection layer above the dielectric layer to provide a phosphor interface, composed of a binary, dielectric material which is non-stoichiometric in its composition and having electrons in a range of energy for injection into the phosphor layer.

372. (Previously Presented) The EL laminate as set forth in claim 354, which further comprises, an injection layer above the second ceramic material to provide a phosphor interface, composed of a binary, dielectric material which is non-stoichiometric in its composition and having electrons in a range of energy for injection into the phosphor layer.

373. (Previously Presented) The EL laminate as set forth in claim 360, which further comprises, an injection layer above the second ceramic material to provide a phosphor interface, composed of a binary, dielectric material which is non-stoichiometric in its composition and having electrons in a range of energy for injection into the phosphor layer.

374. (Previously Presented) The EL laminate as set forth in claim 365, which further comprises, an injection layer above the diffusion barrier layer to provide a phosphor interface, composed of a binary, dielectric material which is non-stoichiometric in its composition and having electrons in a range of energy for injection into the phosphor layer.

375. (Previously Presented) The EL laminate as set forth in claim 371, wherein the injection layer is formed from a material which has greater than 0.5% atomic deviation from its stoichiometric composition.

376. (Previously Presented) The EL laminate as set forth in claim 375, wherein the injection layer is formed from hafnia or yttria.

377. (Previously Presented) The EL laminate as set forth in claim 376, wherein the injection layer has a thickness of 100 to 1000 Å.

378. (Previously Presented) The EL laminate as set forth in claim 374, wherein an injection layer of hafnia is included with a phosphor formed from a zinc sulfide phosphor, and wherein a diffusion barrier layer of zinc sulfide is used with a phosphor formed from a strontium sulfide phosphor.

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603. (Previously Presented) The EL laminate as set forth in claim 288, wherein d_2 is 10 μm or greater.

604. (Currently Amended) The EL laminate of claim 344, wherein the pressed ceramic material has [a] the thickness, after sintering, sufficient to prevent dielectric breakdown during

operation as determined by the equation $d_2=V/S$, wherein d_2 is the thickness of the dielectric layer, S is the dielectric strength of the dielectric layer and V is the maximum applied voltage.

605. (Currently Amended) The EL laminate as set forth in claim [344] 604, wherein d_2 is $10\mu\text{m}$ or greater.

606 - 611 - Canceled.